Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method comprising:

determining a protocol format in which a packet is formatted based on one or more label values in a header of a MultiProtocol Label Switching (MPLS) formatted packet, wherein label values in a first range corresponding to a plurality of values indicate an encapsulated packet of a first network protocol type and label values in a second range corresponding to a plurality of values indicate an encapsulated packet of a second network protocol type, the MPLS label values to be used to switch the packet through a network;

selecting a physical link from a plurality of physical links based on the one or more label values; and

transmitting the packet over the selected physical link.

2. (Original) The method of claim 1 wherein the first protocol type comprises an Internet Protocol (IP) and the second protocol type comprises a Layer-2 MAC Protocol .

3. (Original) The method of claim 1 wherein selecting a physical link from a plurality of physical links based the one or more label values further comprises

performing a hashing function on header field values, the hashing function and the header field values selected based on the one or more label values.

4. (Original) The method of claim 3 wherein performing a hashing function comprises performing a hash on one or more of a source IP address, a destination IP address, an IP type, a source port number, a destination port number, if the data carried by the packet is Internet Protocol (IP) formatted.

5. (Original) The method of claim 3 wherein performing a hashing function comprises performing a hash on one or more of a destination MAC address, a source MAC address, if the data carried by the packet is Layer-2 MAC Protocol formatted.

6. (Currently Amended) A network switch comprising:

an ingress interface having one or more ports to receive network traffic from one or more external sources;

an egress interface having one or more ports to transmit network traffic to one or more external destinations; and

switching control circuitry coupled between the ingress interface and the egress interface, the switching control circuitry to analyze one or more labels in a header of a MultiProtocol Label Switching (MPLS) encapsulated packet received via one of the ports of the ingress interface, the switching control circuitry to determine an underlying protocol format in which the data of the MPLS encapsulated packet is formatted based on values stored in the one or more labels, <u>wherein the MPLS label values are to be used to</u>

switch the packet through a network, the switching control circuitry further to select a physical link from the egress port over which the MPLS encapsulated packet is to be transmitted based on the one or more labels.

7. (Original) The network switch of claim 6 wherein values of the one or more labels correspond to a first range if the underlying protocol format is Internet Protocol (IP) formatted data and one or more of the label values correspond to a second range if the underlying protocol format is Layer-2 MAC Protocol formatted data.

8. (Original) The network switch of claim 6 wherein the switching control circuitry performs a hash on one or more of a source IP address, a destination IP address, an IP type, a source port number, a destination port number, if the data carried by the packet is Internet Protocol (IP) formatted.

9. (Original) The network switch of claim 6 wherein the switching control circuitry performs a hash on one or more of a destination MAC address, a source MAC address, if the data carried by the packet Layer-2 MAC Protocol formatted.

10. (Previously Presented) A network switch comprising:

an ingress interface having one or more ports to receive data from one or more external sources;

an egress interface having one or more ports to transmit data to one or more external destinations;

a backplane having multiple physical links coupled to the ingress interface and to the egress interface, the backplane to carry data between the ingress interface and the egress interface; and

switching control circuitry coupled to the ingress interface, the switching circuitry to analyze one or more labels in a header of a MultiProtocol Label Switching (MPLS) encapsulated packet received via one or the ports of the ingress interface, the switching control circuitry to determine an underlying network protocol format in which the data of the MPLS encapsulated packet is formatted based on whether values stored in the one or more labels correspond to a first plurality of values or a second plurality of values, the switching control circuitry further to select one or more physical links of the backplane over which the MPLS encapsulated packet is to be transmitted to the egress interface based on the one or more labels.

11. (Original) The network switch of claim 10 wherein values of the one or more labels correspond to a first range if the underlying protocol format is Internet Protocol (IP) formatted data and one or more of the label values correspond to a second range if the underlying protocol format is Layer-2 MAC Protocol formatted data.

12. (Original) The network switch of claim 10 wherein the switching control circuitry performs a hash on one or more of a source IP address, a destination IP address, an IP type, a source port number, a destination port number, if the data carried by the packet is Internet Protocol (IP) formatted.

13. (Original) The network switch of claim 10 wherein the switching control circuitry performs a hash on one or more of a destination MAC address, a source MAC address, if the data carried by the packet Layer-2 MAC Protocol formatted.

14. (Currently Amended) An apparatus comprising:

means for determining a protocol format in which a packet is formatted based on one or more label values in a header of a MultiProtocol Label Switching (MPLS) formatted packet, wherein label values in a first range corresponding to a plurality of values indicate an encapsulated packet of a first network protocol type and label values in a second range corresponding to a plurality of values indicate an encapsulated packet of a second network protocol type, the MPLS label values to be used to switch the packet through a network;

means for selecting a physical link from a plurality of physical links based on the one or more label values.

15. (Original) The apparatus of claim 14 wherein the first protocol type comprises an Internet Protocol (IP) and the second protocol type comprises a Layer-2 MAC Protocol.

16. (Original) The apparatus of claim 14 wherein the means for selecting a physical link from a plurality of physical links based the one or more label values further comprises means for performing a hashing function on header field values, the hashing function and the header field values selected based on the one or more label values.

17. (Currently Amended) An article comprising a machine-accessible medium having stored thereon sequences of instructions that, when executed, cause one or more electronic systems to:

determine a protocol format in which a packet is formatted based on one or more label values in a header of a MultiProtocol Label Switching (MPLS) formatted packet, wherein label values in a first range corresponding to a plurality of values indicate an encapsulated packet of a first network protocol type and label values in a second range corresponding to a plurality of values indicate an encapsulated packet of a second network protocol type, the MPLS label values to be used to switch the packet through a network; and

select a physical link from a plurality of physical links based on the one or more label values.

18. (Original) The article of claim 17 wherein the first protocol type comprises an Internet Protocol (IP) and the second protocol type comprises a Layer-2 MAC Protocol.

19. (Original) The article of claim 17 wherein the sequences of instructions that cause the one or more electronic systems to select a physical link from a plurality of physical links based the one or more label values further comprises sequences of instructions that, when executed, cause the one or more electronic systems to perform a

hashing function on header field values, the hashing function and the header field values selected based on the one or more label values.

20. (Original) The article of claim 19 wherein the sequences of instructions that cause the one or more electronic systems to perform a hashing function comprises sequences of instructions that, when executed, cause the one or more electronic systems to perform a hash on one or more of a source IP address, a destination IP address, an IP type, a source port number, a destination port number, if the data carried by the packet is Internet Protocol (IP) formatted.

21. (Original) The article of claim 19 wherein the sequences of instructions that cause the one or more electronic systems to perform a hashing function comprises sequences of instructions that, when executed, cause the one or more electronic systems to perform a hash on one or more of a destination MAC address, a source MAC address, if the data carried by the packet is Layer-2 MAC Protocol formatted.

22. (Currently Amended) A network data signal embodied in a data communications medium shared among a plurality of network devices comprising sequences of instructions that, when executed, cause one or more electronic systems to:

determine a protocol format in which a packet is formatted based on one or more label values in a header of a MultiProtocol Label Switching (MPLS) formatted packet, wherein label values in a first range corresponding to a plurality of values indicate an encapsulated packet of a first network protocol type and label values in a second range

corresponding to a plurality of values indicate an encapsulated packet of a second network protocol type, the MPLS label values to be used to switch the packet through a network; and

select a physical link from a plurality of physical links based on the one or more label values.

23. (Original) The network data signal of claim 22 wherein the first protocol type comprises an Internet Protocol (IP) and the second protocol type comprises a Layer-2 MAC Protocol.

24. (Original) The network data signal of claim 22 wherein the sequences of instructions that cause the one or more electronic systems to select a physical link from a plurality of physical links based the one or more label values further comprises sequences of instructions that, when executed, cause the one or more electronic systems to perform a hashing function on header field values, the hashing function and the header field values selected based on the one or more label values.

25. (Original) The network data signal of claim 24 wherein the sequences of instructions that cause the one or more electronic systems to perform a hashing function comprises sequences of instructions that, when executed, cause the one or more electronic systems to perform a hash on one or more of a source IP address, a destination IP address, an IP type, a source port number, a destination port number, if the data carried by the packet is Internet Protocol (IP) formatted.

26. (Original) The network data signal of claim 24 wherein the sequences of instructions that cause the one or more electronic systems to perform a hashing function comprises sequences of instructions that, when executed, cause the one or more electronic systems to perform a hash on one or more of a destination MAC address, a source MAC address, if the data carried by the packet is Layer-2 MAC Protocol formatted.